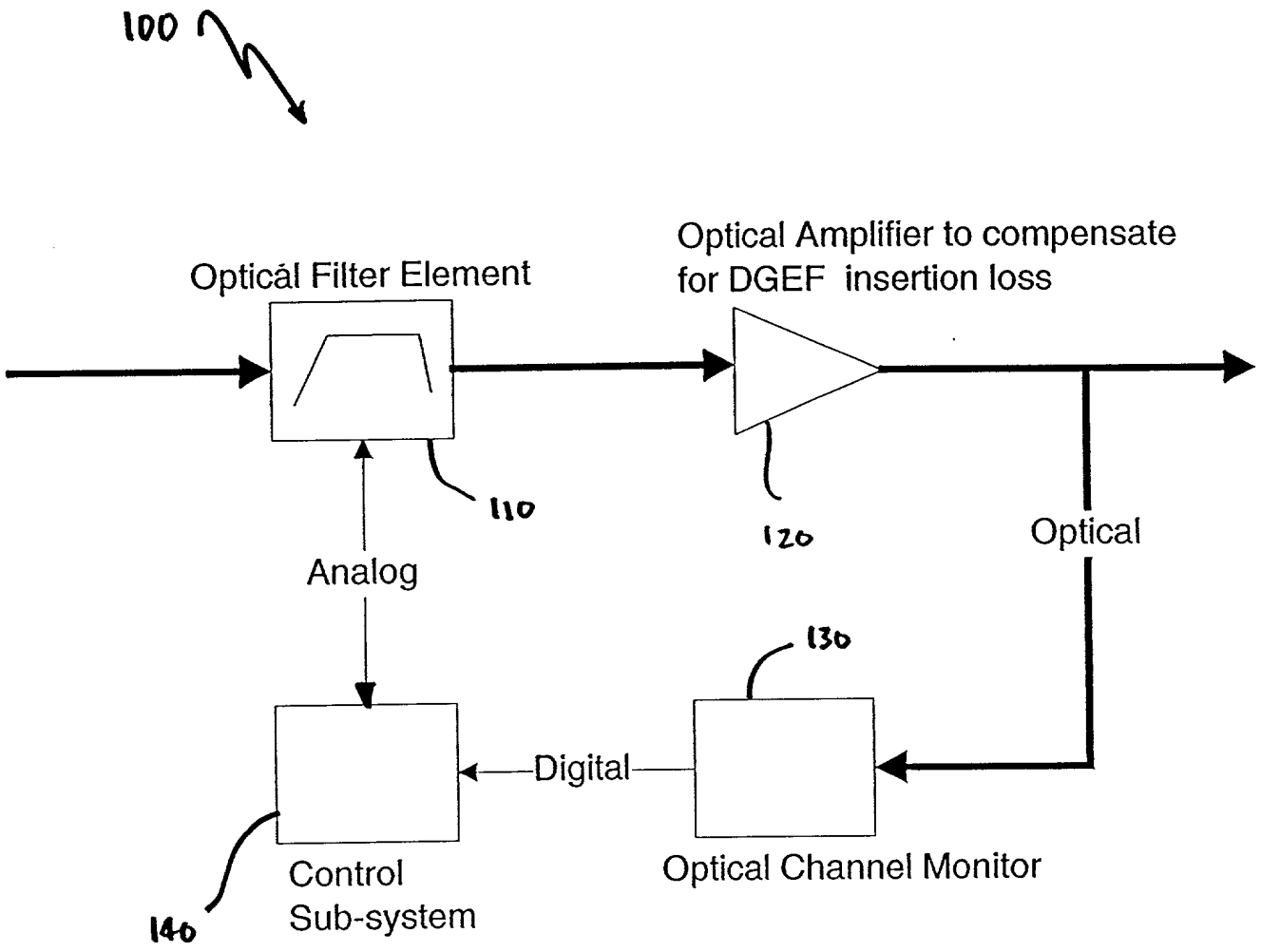

100
Optical Filter Element
Optical Amplifier to compensate for DGEF insertion loss
110
120
Analog
Optical
130
Digital
Control Sub-system
Optical Channel Monitor
140

Figure 1

Dynamic Gain Equalization Filter Control System

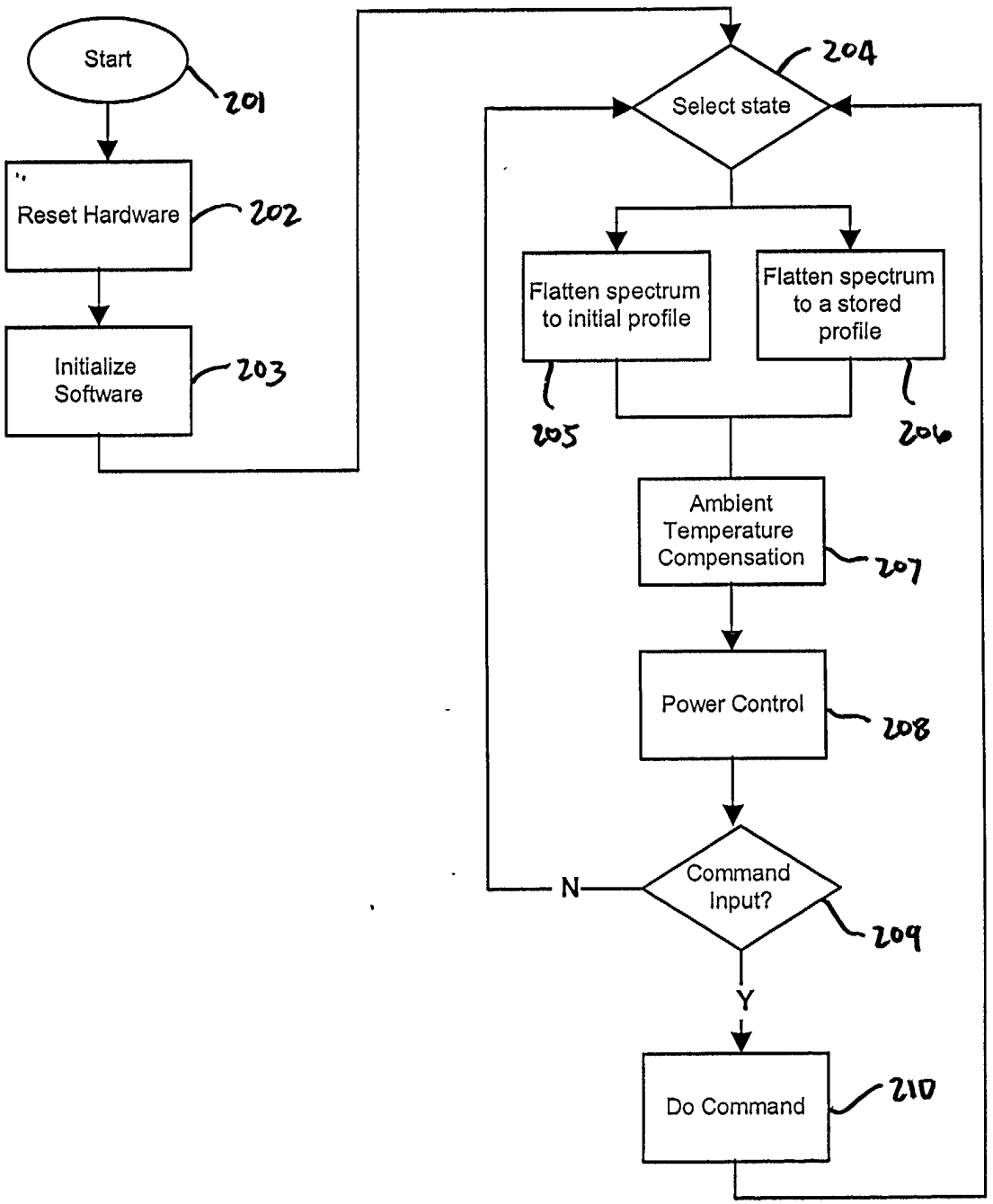


Figure 2

Dynamic Gain Equalization Filter State Diagram

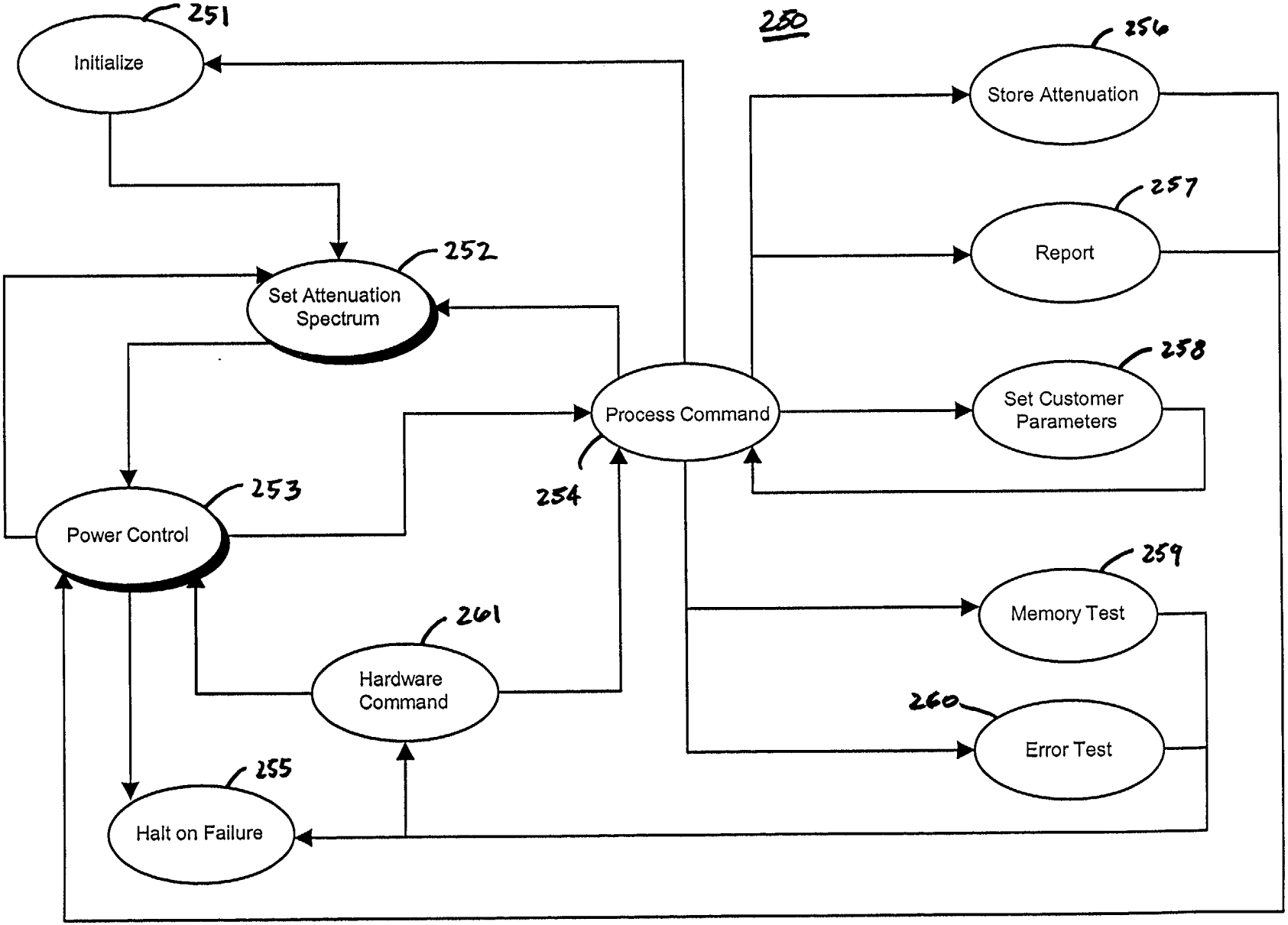
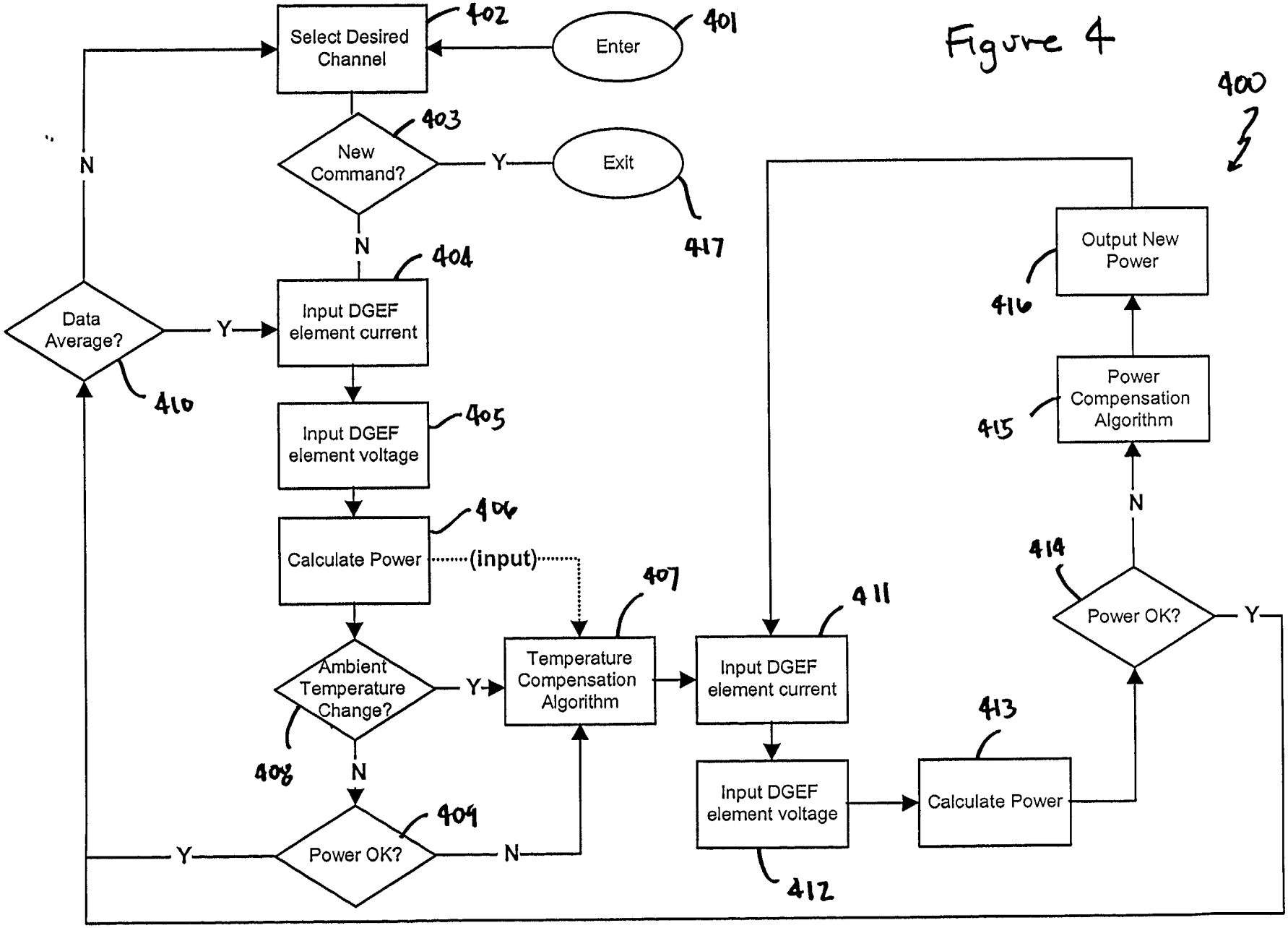


Figure 3

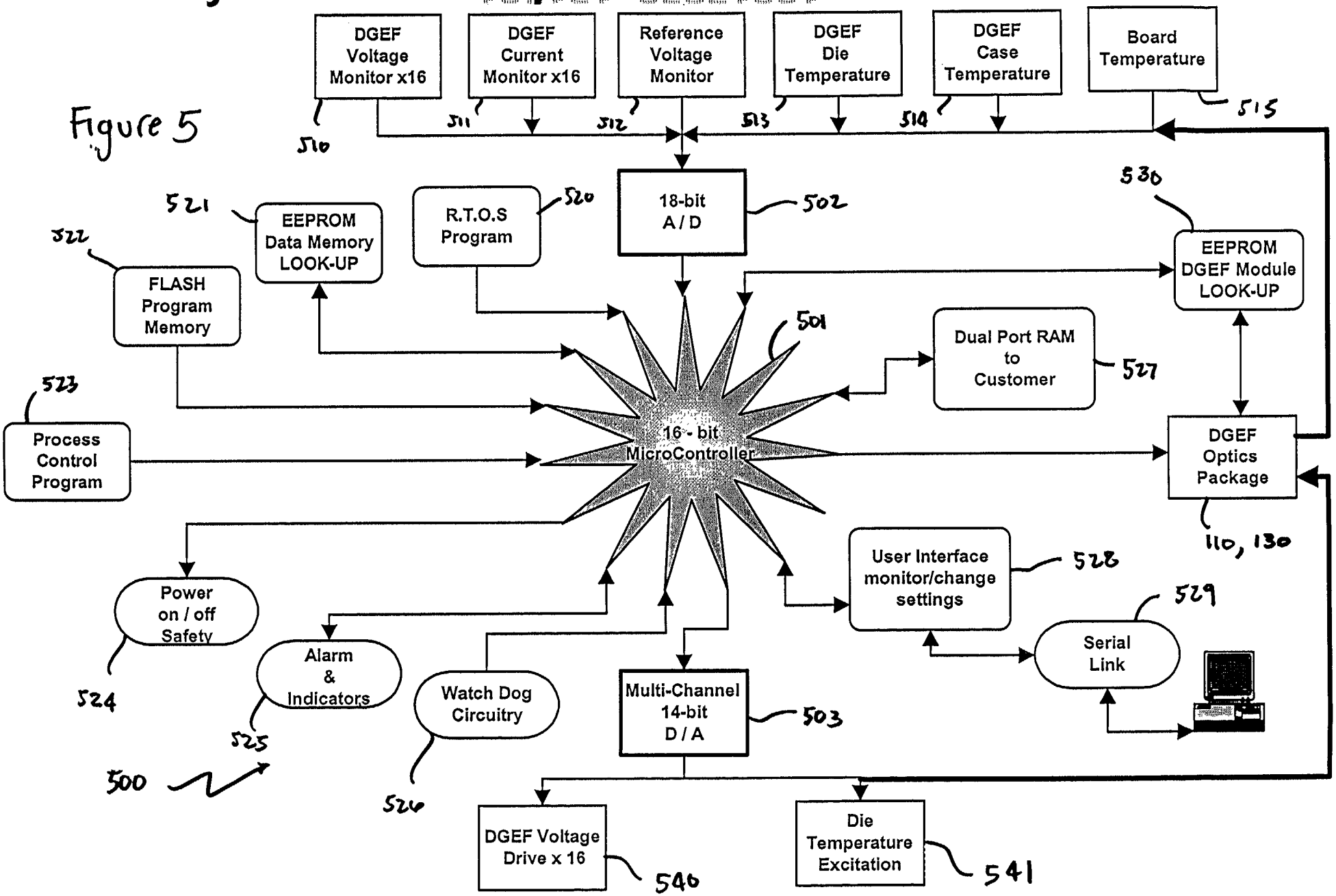
Dynamic Gain Equalization Filter Power Control State

Figure 4



SiWG Dynamic Gain Equalization Filter Embedded Control

Figure 5



Dynamic Gain Equalization Filter Firmware Architecture

Figure 6

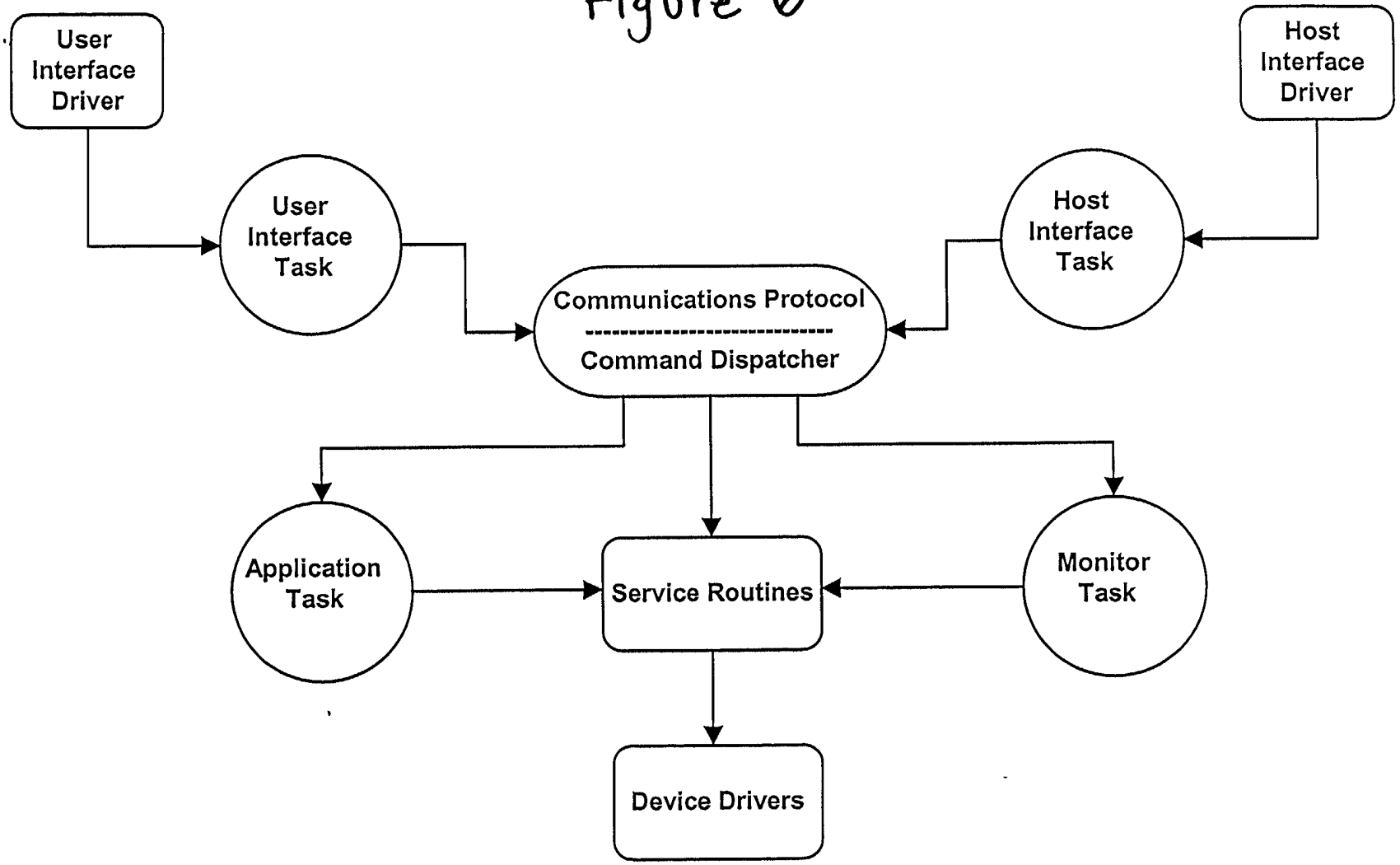
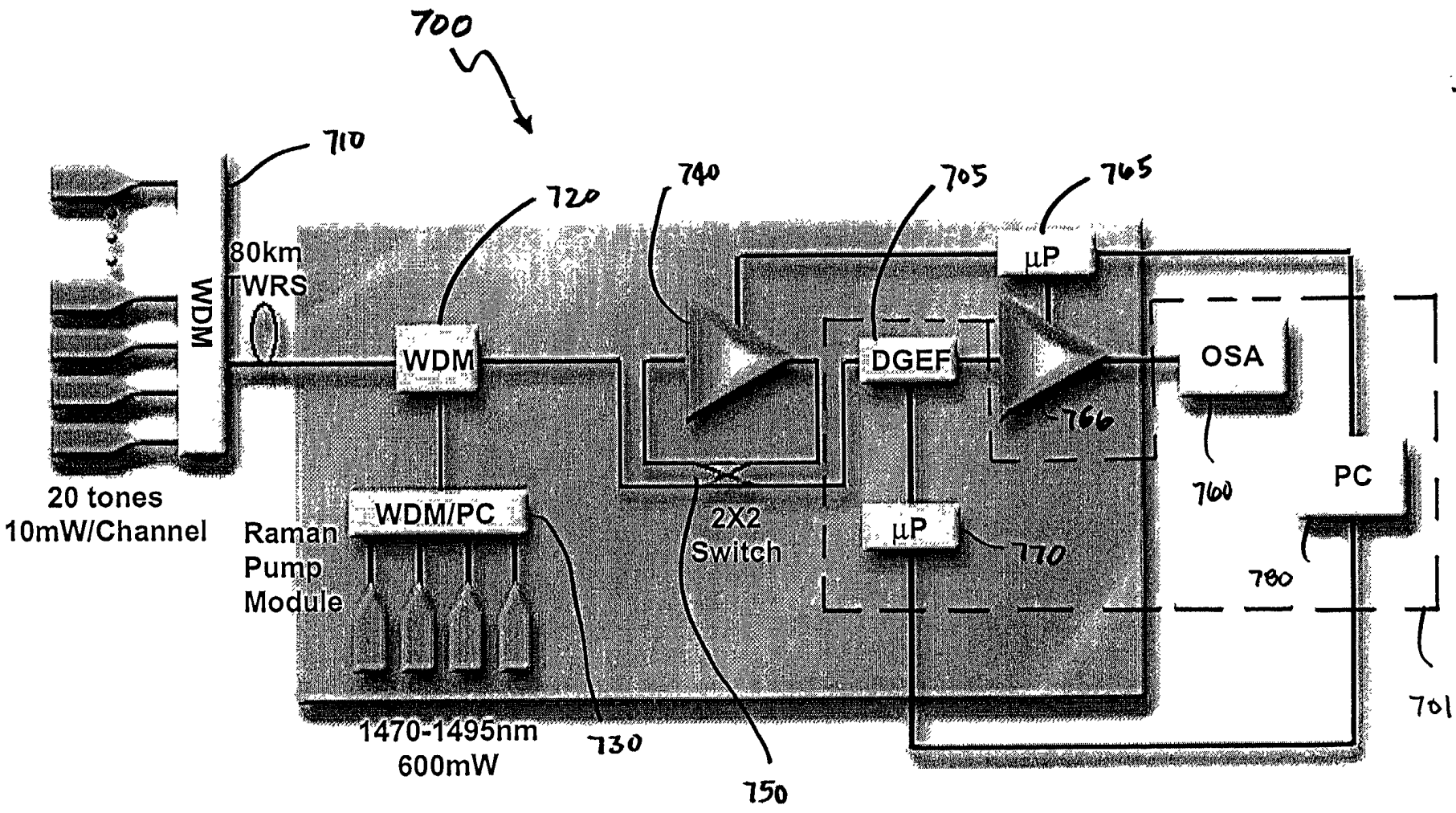


Figure 7


700
710
720
740
705
765
80km
TWRS
WDM
WDM
DGEF
μP
OSA
766
760
PC
20 tones
10mW/Channel
Raman
Pump
Module
WDM/PC
2X2
Switch
μP
770
780
701
1470-1495nm
600mW
730
750

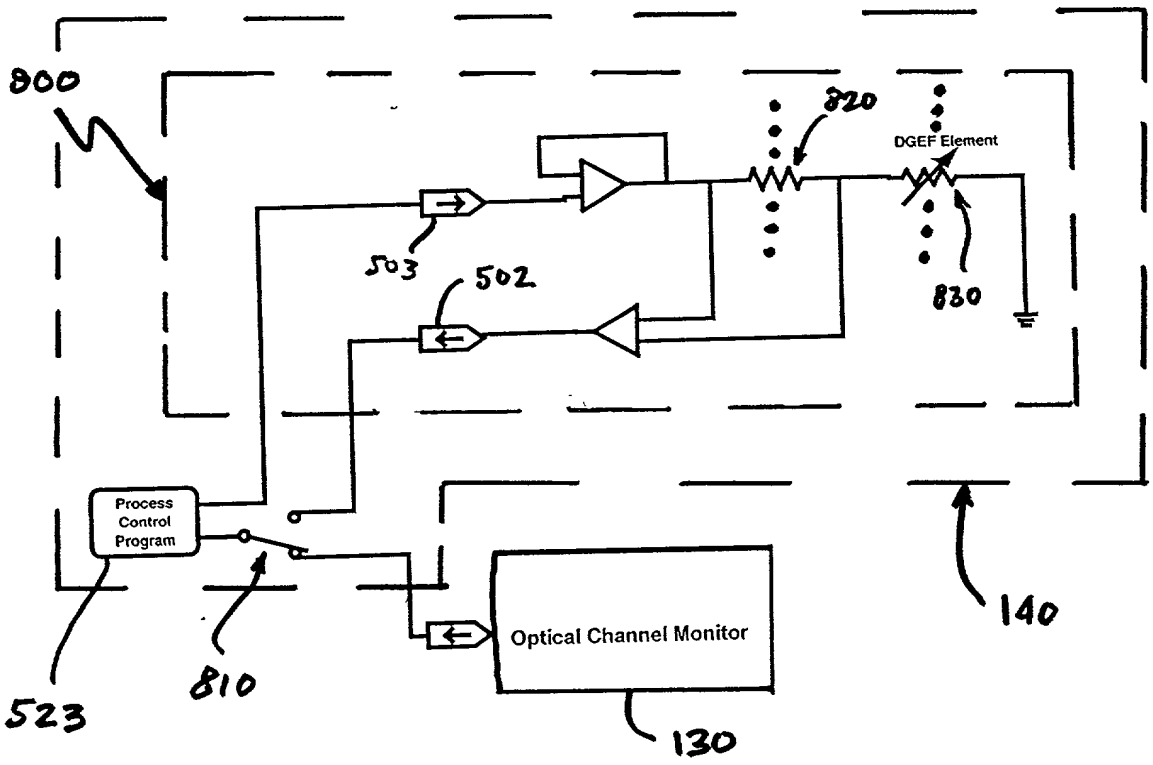

800
820
DGEF Element
503
502
830
Process Control Program
Optical Channel Monitor
140
523
810
130

Figure 8